

HCV Transmission via Blood Splash into Conjunctiva (2/04)

Hosoglu, S, Celen MK, Akalin S, Geyik MF, Soyoral Y, Kara IH. Transmission of hepatitis C by blood splash into conjunctiva in a nurse. *Am J Infect Control* 2003;31:502–504.

This case report describes the transmission of hepatitis C virus (HCV) following a blood splash to a nurse's eye from a patient who was anti-HCV positive. The individual washed her eyes and face with water immediately and reported the incident. Prior to the incident, the nurse was healthy, never used intravenous drugs nor received transfusions. She had not had a tattoo, needlestick accident, or any other risky contact in the last six months. Her anti-HCV and HCV-RNA tests both produced negative results. She was followed-up for anti-HCV and alanine aminotransferase activity. After six months, she presented with sore throat, nausea, vomiting, fatigue, and weight loss. She had icterus and hepatomegalia. She began treatment for HCV infection. After one year of treatment, her HCV-RNA test produced negative results and her transaminase levels were normal.



DIS Comment: HCV appears not to be transmitted efficiently through occupational exposures to blood. Follow-up studies of HCP exposed to HCV-infected blood through percutaneous or other sharps injuries have determined a low incidence of seroconversion (mean: 1.8%; range, 0%–7%). One study determined transmission occurred from hollow-bore needles but not other sharps. Although these studies have not documented seroconversion associated with mucous membrane or nonintact skin exposure, at least two other cases of HCV transmission from a blood splash to the conjunctiva and one case of simultaneous transmission of HCV and HIV after nonintact skin exposure have been reported.

Avoiding occupational exposure to blood is the primary way to prevent transmission of hepatitis B virus, HCV, and HIV in health-care settings. All health-care personnel should adhere to recommended standard precautions, which include the use of personal protective equipment (e.g., gloves, masks, protective eyewear, and gowns), and always follow current U.S. Public Health Service/CDC recommendations following an occupational exposure incident.

Selected References

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